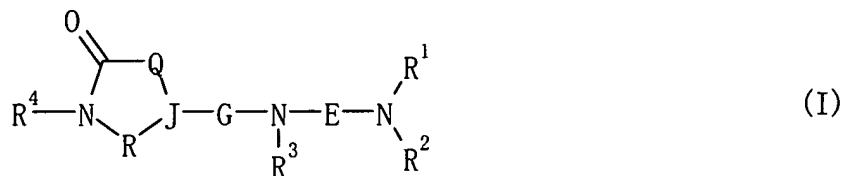


**In the Claims**

**Please cancel claims 4, 6, 10, 31, 33 and 37 without prejudice to the filing of future continuing applications.**

**Please substitute the following claims 1, 2, 5, 7, 16, 26, 27, 32 and 34 for the claims 1, 2, 5, 7, 16, 26, 27, 32 and 34 now pending in the above-identified application.**

1. (Currently Amended) A compound of the formula:



wherein  $R^1$  and  $R^2$  may in combination form,

together with an adjacent nitrogen atom, a 1-piperidinyl, ~~1-homopiperidinyl, 1-~~  
~~piperazinyl or 1-homopiperazinyl~~ ring optionally having a substituent or substituents;

R<sup>3</sup> is a hydrocarbon group optionally having a substituent or substituents or a heterocyclic group optionally having a substituent or substituents;

R<sup>4</sup> is a hydrogen atom, a hydrocarbon group optionally having a substituent or substituents or a heterocyclic group optionally having a substituent or substituents;

**E** ~~is a divalent chain hydrocarbon group optionally having~~  
~~a substituent or substituents other than an exo group~~ **is a trimethylene group;**

G is CO or SO<sub>2</sub>;

J is a nitrogen atom or a methine group optionally having a substituent or substituents; and

Q and R are each a bond or a divalent chain C<sub>1-3</sub> hydrocarbon group optionally having a substituent or substituents,

or a salt thereof.

2. (Currently Amended) The compound of claim 1, wherein R<sup>3</sup> is a C<sub>1-6</sub> alkyl group optionally having a substituent or substituents, a C<sub>3-8</sub> cycloalkyl group optionally having a substituent or substituents, an aryl group optionally having a substituent or substituents or a heterocyclic group optionally having a substituent or substituents; R<sup>4</sup> is a hydrogen atom, alkyl group optionally having a substituent or substituents, a C<sub>3-8</sub> cycloalkyl group optionally having a substituent or substituents, an aryl group optionally having a substituent or substituents or a heterocyclic group optionally having a substituent or substituents; ~~E is a C<sub>2-5</sub> alkylene group optionally having a substituent or substituents other than oxo group~~; G is CO or SO<sub>2</sub>; J is a nitrogen atom or a methine group optionally having a substituent or substituents; and Q and R are each a bond or a C<sub>1-3</sub> alkylene group optionally having a substituent or substituents.

3. (Cancelled)

4. (Cancelled)

5. (Currently Amended) The compound of ~~claim 4~~ claim 1, wherein the substituent of the 1-piperidinyl group ~~or 1-piperazinyl group~~ is (1) phenyl-C<sub>1-4</sub> alkyl optionally having halogen on a benzene ring, (2) diphenylmethyl optionally having hydroxy, (3) benzoyl optionally having halogen on a benzene ring, (4) 2-phenylethen-1-yl, (5) phenyl optionally having halogen, (6) hydroxy, (7) phenoxy or (8) benzyloxy.

6. (Cancelled)

7. (Currently Amended) The compound of ~~claim 6~~ claim 1, wherein the substituent of the 1-piperidinyl group is a benzyl group optionally having halogen on a benzene ring.

8. (Original) The compound of claim 1, wherein  $R^3$  is (1) a  $C_{1-6}$  alkyl group, (2) a  $C_{3-8}$  cycloalkyl group, (3) a benzyl group optionally having a hydroxy group, (4) a naphthylmethyl group, (5) a phenyl group optionally having, as a substituent, (a)  $C_{1-4}$  alkyl optionally having halogen, (b)  $C_{1-4}$  alkoxy optionally having halogen, (c) phenyl, (d) cyano, (e) benzyloxy or (f) a halogen atom, (6) a naphthyl group, (7) an indanyl group or (8) a tetrahydronaphthyl group.

9. (Original) The compound of claim 1, wherein  $R^3$  is a phenyl group optionally having, as a substituent,  $C_{1-4}$  alkyl or halogen.

10. (Cancelled)

11. (Original) The compound of claim 1, wherein  $R^4$  is (1) a hydrogen atom, (2)  $C_{1-6}$  alkyl optionally having (a) halogen, (b) pyridyl, (c) morpholino, (d) furyl, (e) ethynyl or (f)  $C_{3-8}$  cycloalkyl, (3) phenyl- $C_{1-4}$  alkyl optionally having (a) halogen, (b)  $C_{1-4}$  alkyl, (c) halogeno- $C_{1-4}$  alkyl or (d)  $C_{1-4}$  alkoxy on a benzene ring, or (4)  $C_{3-8}$  cycloalkyl.

12. (Original) The compound of claim 1, wherein  $R^4$  is (a)  $C_{1-4}$  alkyl group optionally having, as a substituent, halogen or furyl or (b) a benzyl group optionally having halogen on a benzene ring.

13. (Original) The compound of claim 1, wherein  $-N(R^1)R^2$  is a 1-piperidinyl group optionally having a substituent or substituents, E is a trimethylene group,  $R^3$  is a phenyl group optionally having a substituent or substituents, G is CO, J is CH, and Q and R are each a methylene group.

14. (Original) A compound selected from the group consisting of *N*-[3-(4-benzyl-1-piperidinyl)propyl]-*N*-(3,4-dichlorophenyl)-1-methyl-5-oxo-3-pyrrolidinecarboxamide, 1-benzyl-*N*-[3-(4-benzyl-1-piperidinyl)propyl]-5-oxo-*N*-phenyl-3-pyrrolidinecarboxamide, 1-(2-chlorobenzyl)-*N*-[3-(4-benzyl-1-piperidinyl)propyl]-5-oxo-*N*-phenyl-3-pyrrolidinecarboxamide, *N*-[3-[4-(4-fluorobenzyl)-1-piperidinyl]propyl]-*N*-(3,4-dichlorophenyl)-1-methyl-5-oxo-3-pyrrolidinecarboxamide and *N*-[3-(4-benzyl-1-piperidinyl)propyl]-5-oxo-*N*-phenyl-1-(2,2,2-trifluoroethyl)-3-pyrrolidinecarboxamide, or a salt thereof.

15. (Original) A prodrug of the compound of claim 1.

16. (Currently Amended) A **pharmaceutical** composition comprising the compound of claim 1 or a prodrug thereof and a pharmaceutically acceptable carrier, excipient or diluent.

Claims 17-21 (Cancelled)

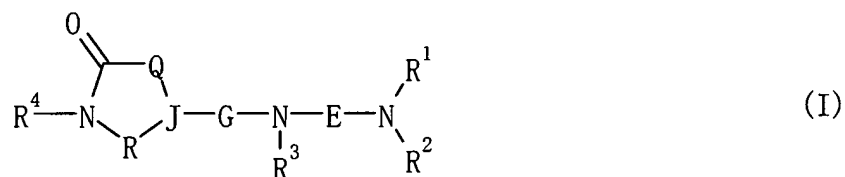
22. (Withdrawn) The composition of claim 16, further comprising a protease inhibitor, a reverse transcriptase inhibitor or a combination thereof.

23. (Withdrawn) The composition of claim 22, wherein the reverse transcriptase inhibitor is zidovudine, didanosine, zalcitabine, lamivudine, stavudine, abacavir, nevirapine, delavirdine or efavirenz.

24. (Withdrawn) The composition of claim 22, wherein the protease inhibitor is saquinavir, ritonavir, indinavir, amprenavir or nelfinavir.

25. (Previously Presented) A method for the prophylaxis or treatment of HIV infectious diseases comprising administering to a subject in need thereof, a compound of claim 1 or a prodrug thereof, and a protease inhibitor and/or a reverse transcriptase inhibitor such that HIV infectious disease is prevented or treated.

26. (Currently Amended) A method for producing a compound of the formula:



wherein  $R^1$  and  $R^2$  may in combination form,

together with an adjacent nitrogen atom, a 1-piperidinyl, ~~1-homopiperidinyl, 1-piperazinyl or 1-homopiperazinyl~~ ring

optionally having a substituent or substituents;

$R^3$  is a hydrocarbon group optionally having a substituent or substituents or a heterocyclic group optionally having a substituent or substituents;

$R^4$  is a hydrogen atom, a hydrocarbon group optionally

having a substituent or substituents or a heterocyclic  
group optionally having a substituent or substituents;

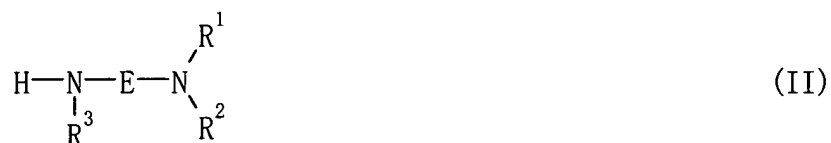
E ~~is a divalent chain hydrocarbon group optionally having~~  
~~a substituent or substituents other than an oxo group~~ is a trimethylene group;

G is CO or SO<sub>2</sub>;

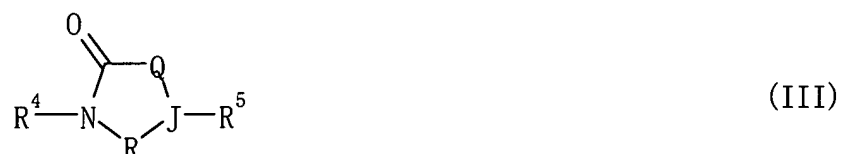
J is a nitrogen atom or a methine group optionally having  
a substituent or substituents; and

Q and R are each a bond or a divalent chain C<sub>1-3</sub> hydrocarbon  
group optionally having a substituent or  
substituents,

or a salt thereof, which method comprises reacting a compound of the formula:

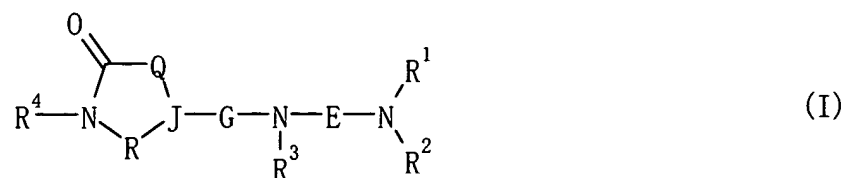


wherein each symbol is as defined above, or a salt thereof, and a compound of the formula:



wherein R<sup>5</sup> is a carboxyl group or a sulfonic acid group, a salt thereof or a reactive derivative thereof, and other symbols are as defined above, or a salt thereof.

27. (Currently Amended) A method for producing a compound of the formula:



wherein R<sup>1</sup> and R<sup>2</sup> may in combination form,

together with an adjacent nitrogen atom, a 1-piperidinyl, ~~1-homopiperidinyl, 1-~~

~~piperazinyl or 1-homopiperazinyl~~ ring

optionally having a substituent or substituents;

R<sup>3</sup> is a hydrocarbon group optionally having a substituent

or substituents or a heterocyclic group optionally

having a substituent or substituents;

R<sup>4</sup> is a hydrogen atom, a hydrocarbon group optionally

having a substituent or substituents or a heterocyclic

group optionally having a substituent or substituents;

E ~~is a divalent chain hydrocarbon group optionally having~~

~~a substituent or substituents other than an oxo group~~ is a trimethylene group;

G is CO or SO<sub>2</sub>;

J is a nitrogen atom or a methine group optionally having

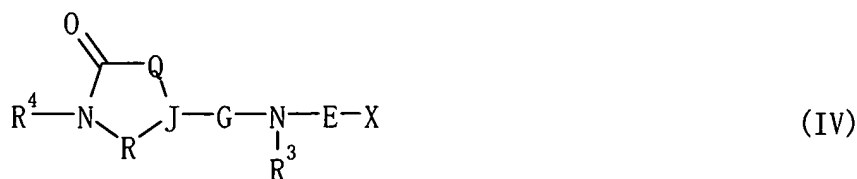
a substituent or substituents; and

Q and R are each a bond or a divalent chain C<sub>1-3</sub> hydrocarbon

group optionally having a substituent or

substituents,

or a salt thereof, which method comprises reacting, in the presence of a base, a compound of the formula:





wherein X is a leaving group, and other symbols are as defined above, or a salt thereof and a compound of the formula:



wherein each symbol is as defined above, or a salt thereof.

28. (Previously Presented) A method for suppressing CCR5 receptor activity, which method comprises administering an effective amount of the compound of claim 1 to a mammal in need thereof.

29. (Previously Presented) A method for the production of a pharmaceutical agent that suppresses a chemokine receptor activity comprising combining a compound of claim 1 with a pharmaceutically acceptable carrier, diluent or excipient.

30. (Cancelled)

31. (Cancelled)

32. (Currently Amended) The method of claim ~~31~~ 28, wherein the substituent of the 1-piperidinyl group ~~or 1-piperazinyl group~~ is (1) phenyl-C<sub>1-4</sub> alkyl optionally having halogen on a benzene ring, (2) diphenylmethyl optionally having hydroxy, (3) benzoyl optionally having halogen on a benzene ring, (4) 2-phenylethen-1-yl, (5) phenyl optionally having halogen, (6) hydroxy, (7) phenoxy or (8) benzyloxy.

33. (Cancelled)

34. (Currently Amended) The method of ~~claim 33~~ claim 28, wherein the substituent of the 1-piperidinyl group is a benzyl group optionally having halogen on a benzene ring.

35. (Previously Presented) The method of claim 28, wherein R<sup>3</sup> is (1) a C<sub>1-6</sub> alkyl group, (2) a C<sub>3-8</sub> cycloalkyl group, (3) a benzyl group optionally having a hydroxy group, (4) a naphthylmethyl group, (5) a phenyl group optionally having, as a substituent, (a) C<sub>1-4</sub> alkyl optionally having halogen, (b) C<sub>1-4</sub> alkoxy optionally having halogen, (c) phenyl, (d) cyano, (e) benzyloxy or (f) a halogen atom, (6) a naphthyl group, (7) an indanyl group or (8) a tetrahydronaphthyl group.

36. (Previously Presented) The method of claim 28, wherein R<sup>3</sup> is a phenyl group optionally having, as a substituent, C<sub>1-4</sub> alkyl or halogen.

37. (Cancelled)

38. (Previously Presented) The method of claim 28, wherein R<sup>4</sup> is (1) a hydrogen atom, (2) C<sub>1-6</sub> alkyl optionally having (a) halogen, (b) pyridyl, (c) morpholino, (d) furyl, (e) ethynyl or (f) C<sub>3-8</sub> cycloalkyl, (3) phenyl-C<sub>1-4</sub> alkyl optionally having (a) halogen, (b) C<sub>1-4</sub> alkyl, (c) halogeno-C<sub>1-4</sub> alkyl or (d) C<sub>1-4</sub> alkoxy on a benzene ring, or (4) C<sub>3-8</sub> cycloalkyl.

39. (Previously Presented) The method of claim 28, wherein  $R^4$  is (a)  $C_{1-4}$  alkyl group optionally having, as a substituent, halogen or furyl or (b) a benzyl group optionally having halogen on a benzene ring.
40. (Previously Presented) A method for the prophylaxis or treatment of AIDS comprising administering an effective amount of a compound of claim 1 to a mammal in need thereof.
41. (Previously Presented) A method for suppressing the progress of the disease state of AIDS comprising administering an effective amount of a compound of claim 1 to a mammal in need thereof.

## **I. Amendments**

By this amendment, claims 1, 2, 5, 7, 16, 26, 27, 32 and 34 have been amended and claims 4, 6, 10, 31, 33 and 37 have been canceled.

Page 17 of the specification has also been amended.

This amendment adds no new matter to the specification. Support for this amendment is found in the specification and claims as filed.

No change of inventorship is necessitated by this amendment.

## **II. Request for Clarification of the Status of the Pending Claims**

Applicants note that pending claims 5, 7-9, 11-13, 15, 40 and 41 were not listed as pending by the Examiner. However, these claims have neither been cancelled nor withdrawn. Furthermore, Applicants believe that these claims are in accordance with the restriction requirement, and thus should be presently examined. Clarification of the status of pending claims 5, 7-9, 11-13, 15, 40 and 41 is hereby requested.